UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,652	01/23/2001	Glenn Ferguson	033048-036	4298

			EXAMINER
21839	7590	06/22/2004	FERRIS III, FRED O

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

ART UNIT	PAPER NUMBER
2128	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 January 2001_.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-11_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-11_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _21 February 2002_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-11 have been presented for examination based on applicant's

disclosure filed on 23 January 2001. Claims 1-11 have been rejected by the examiner.

Drawings

2.   The formal drawings filed 21 February 2002 (paper #6) have been reviewed and

approved by the examiner pending review by the draftsperson.

Oath/Declaration

3.   An application in which the benefits of an earlier application are desired must

contain a specific reference to the prior application(s) in the first sentence of the

specification or in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)).

        This application filed under former 37 CFR 1.60 lacks the necessary reference to

the prior application. A statement reading "_This is a division of Application No._

09/699353, filed 31 October 2000." should be entered following the title of the invention

or as the first sentence of the specification. Also, the current status of all nonprovisional

parent applications referenced should be included.

Claim Interpretation

4.   The claimed invention is disclosed to be a data model for modeling/storing

computer network information relating to software, configuration information, monitoring

information, hardware-information, (DNS) information, network information, and

information regarding queues in accessing/maintaining a network. The claimed

invention makes use of popular techniques commonly used in the art such as intelligent

agents and "role based access control" (RBAC) where access (permission) to

information and system resources is based on a users need to execute in the system

and requires identification of "roles" in the system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent 6,345,239 issued to Bowman-Amuah in view of "Oracle Intelligent

Agent User's Guide", Oracle Corporation, Release 8.1.7, PN A85251-01,

September 2000.

Independent claims 1, 4, and 6 include limitations drawn to:

Queue data model for intelligent agents performing network tasks from command list:
- *queue entities representing list of tasks to be preformed by agents*
- *queue commands relating queues entities with agent commands/outputs*
- *command output entities representing agent output commands*
- *command entities representing commands to be executed by agents*

Regarding independent claims 1, 4, and 6: Bowman-Amuah discloses a **network data model** for **relating network objects** *(e-commerce business capabilities)* where **entities** *(customer accounts entities in the network)* are organized as **customer tiers** including **application support** *(layers)* and consisting of **customer sites** *(data centers and devices)* that are connected via a VLAN allowing customer **components** *(via IP addresses)* **network access** to various **levels** of **support** and **software revisions**. *(Abstract, Summary of Invention, Figs. 1a-h, 2a&b, 8a&b, 18, 24, 25, 52-57, 71, 73, 74, 80, CL16-L19-43, CL51-L34-45, C59-L8-55, CL115-L11-30, CL121-L1-30)*

For example, Bowman-Amuah discloses the elements of the limitations of the claimed invention as follows:

- *Queue data model for intelligent agents performing network tasks from command list*: Bowman-Amuah discloses a network data model relating network data objects as entities. *(CL40-L 26, CL64-L55, CL66-L31-CL69-L65, Figs. 12-26)*

- *queue entities representing list of tasks to be preformed by agents*: Bowman-Amuah discloses a network *(listed)* network tasks. *(CL11-L49-65, CL69-L55-CL73-L65, Figs. 22-35)*

- *queue commands relating queues entities with agent commands/outputs*: Bowman-Amuah discloses a network commands *(requirements)* and outputs. *(CL69-L55-CL73-L65, CL77-L13-CL83-L65, Figs. 22-35, 37-50)*

- *command output entities representing agent output commands*: Bowman-Amuah discloses a network commands *(requirements)* and outputs. *(CL69-L55-CL73-L65, CL77-L13-CL83-L65, Figs. 22-35, 37-50)*

Bowman-Amuah does not explicitly teach the use of <u>intelligent agents</u> executing

commands for performing network tasks.

Oracle discloses intelligent agents for performing network tasks. The use of

Intelligent agents is well-known to one of ordinary skill in the art as an autonomous

process running in the network for providing supporting database service. For example,

an intelligent agent can be programmed (commanded) to be responsible for:

-   providing local service, calling OS services, interact with targets

-   accepting jobs (tasks) or events from other applications

-   collecting and **queuing** results/outputs

-   checking events, **queuing** event reports

-   canceling jobs or events (tasks)

-   handling network management/protocol

For example, Oracle discloses the elements of the limitations of the claimed

invention as follows:

- <u>command entities representing commands to be executed by agents</u>: Oracle

discloses the use of intelligent agents in executing commanded network tasks.

(Chapters 1: 1-2 to 1-5, 2: 2-2 to 2-23, 3: 3-2 to 3-14)

It would have been obvious to one having ordinary skill in the art at the time the

claimed invention was made to modify the teachings Bowman-Amuah relating to

a network data model relating network objects and entities, with the teachings of Oracle

relating to the use of intelligent agents for performing network tasks, to realize the

claimed invention. An obvious motivation exists since, as referenced in the prior art, the

use intelligent agents provides a more efficient method of network control and analysis

since agents exhibit independent intelligence, mobility and can operate autonomy and

varying degrees of commanded constraints. (see Bigus, Background, for example) The

examiner further notes that a "queue", is merely a multi-element data structure from

which elements can be removed in the same order which they were inserted (Microsoft

Computer Dictionary, 1997), and hence, would have been an obvious design choice

used by on skilled in the in implementing the queues features of the claimed invention.

Per dependent claims 2-3, 5, 7-11: This group of claims includes limitations

relating to a locking mechanism for preventing agents from executing commands based

queuing, busy signals, tasks, and relationships which are inherent control features of

the Oracle intelligent agents (see: Chapter 3).

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U.S. Patent 6,243,396 issued to Somers discloses intelligent agents for management of

network functions.

U.S. Patent 6,243,396 issued to Somers discloses intelligent agents performing network

tasks.

"The SIFT Information Dissemination System", T. Yan, ACM Transactions on Database

Systems, Vol. 24, No. 4, pp. 529-565, December 1999 discloses agents controlling

network functions.

"Market-based Resource Control for Mobil Agents", J. Bredin, Autonomous Agents 98',

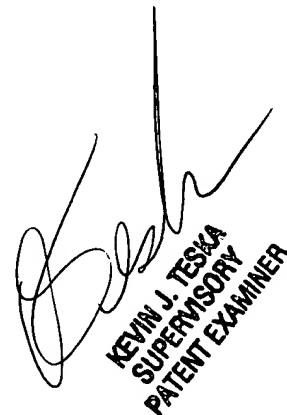*pp. 197-204, ACM 1998 discloses agents controlling network functions.*

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fred Ferris whose telephone number is 703-305-9670

and whose normal working hours are 8:30am to 5:00pm Monday to Friday.

Any inquiry of a general nature relating to the status of this application should be

directed to the group receptionist whose telephone number is 703-305-3900.

The Official Fax Numbers are:

Official   (703) 872-9306

Fred Ferris, Patent Examiner
Simulation and Emulation, Art Unit 2128
U.S. Patent and Trademark Office
Crystal Park 2, Room 5D53
Crystal City, Virginia 22202
Phone: (703) 305 - 9670
FAX: (703) 305 - 7240
Fred.Ferris@uspto.gov
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KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER